



U.S. Department  
of Transportation  
**Research and  
Special Programs  
Administration**

400 Seventh St., S.W.  
Washington, D.C. 20590

AUG 11 2004

Mr. Glen VanderVeen  
Program Director  
Belshire Environmental Services, Inc.  
25971 Towne Centre Drive  
Lake Forest, CA 92610

Ref. No.: 04-0063

Dear Mr. VanderVeen:

This responds to your letter regarding the transportation of solids that have absorbed flammable liquids in accordance with the Hazardous Material Regulations (HMR; 49 CFR Parts 171-180). Specifically, you request clarification of the requirements as they apply to a flammable liquid (unleaded gasoline) contained in absorbent material used to clean surface spills, used fuel filters, and used hoses from retail gasoline outlets. Hypothetically, you stated that the gasoline would be absorbed into the materials, the materials would be classed as a Division 4.1 (flammable solid), all liquid would be drained, and no free liquid would be visible at the time the package is closed. Your questions are paraphrased and answered as follows:

- Q1. Your understanding is that the "burn rate" test in accordance with the UN Manual of Tests and Criteria prescribed in 173.125(a) is designed for granular materials and would not be an appropriate test method for fuel filters or hoses. You ask for guidance to establish a program to determine through testing or other means whether the materials described above would be subject to the HMR.
- A1. For a Division 4.1 (flammable solid), the UN Manual of Tests and Criteria prescribed in § 173.125(a) is the standard for determining the appropriate classification in the Class 4 hazard class. The packing group criteria for readily combustible materials or readily combustible solids, other than metal powders, is prescribed in § 173.125(b)(1) and (2). If free flowing liquid can be seen surrounding your materials, they may meet the definition of a flammable liquid in § 173.120. If there is no free liquid surrounding these materials, they may meet the definition of a flammable solid in § 173.124. If your materials absorbed with gasoline do not meet any of the hazard class definitions in Part 173, including hazardous waste, hazardous substance, or marine pollutant, they are not regulated under the HMR. It is a shipper's responsibility to classify a hazardous material. This Office does not perform that function.

The entry "Solids containing flammable liquid, n.o.s." in the § 172.101 Hazardous Materials Table (§ 172.101 HMT) contains Special Provision "47" in Column 7. In accordance with Special Provision "47" in § 172.102, mixtures of solids that are not



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172.102

subject to the HMR (e.g., absorbent material used to clean surface spills, used fuel filters and hoses) and flammable liquids (e.g., gasoline) may be transported under the entry “Solids containing flammable liquid, n.o.s., 4.1, UN 3175, PG II” in the § 172.101 HMT, without first applying the classification criteria of Division 4.1, provided there is no free liquid visible at the time the material is loaded or at the time the packaging or transport unit is closed. Each non-bulk packaging must correspond to a design type that has passed a leakproofness test at the Packing Group II level.

- Q2. Assuming the used fuel filters and hoses absorbed with gasoline are a flammable solid and not a hazardous waste, would the Material of Trade (MOTS) exception in §173.6 apply to maintenance contractors who carry and replace fuel filters in pump and tank equipment at gas stations.
- A2. By definition, MOTS include a hazardous material that is transported by a private carrier in direct support of its principal business where the principal business is not transportation by motor vehicle (see §171.8). If the fuel filters meet the definition for a flammable solid and do not meet the definition for a hazardous waste for purposes of transportation and provided all conditions of § 173.6 are met, the maintenance contractors performing private carriage by highway may transport such materials under the MOTS exception.

A non-bulk packaging must be marked with the proper shipping name or common name of the material it contains, and a bulk packaging must display the identification number either on an orange panel, placard, or a white square-on-point configuration. MOTS are not subject to any other hazard communication requirements of the HMR (e.g., shipping papers, labels and placards, and emergency response information) besides those referenced in § 173.6(c). Packagings must be sift proof, secured against movement, and protected from damage. For a Packing Group II material, the gross mass or capacity of the packaging may not exceed 30 kg (66 pounds) or 30 L (8 gallons). The aggregate gross weight of all the MOTS on a motor vehicle may not exceed 200 kg (440 pounds), except for MOTS authorized in § 173.6 (a)(1)(iii) .

- Q3. Would the small quantity exception in § 173.4 apply if each package contains a flammable solid with 30 g or less of solid material (absorbent or filter) or a solid with 30 ml or less of gasoline per package.
- A3. Yes. Hazardous materials meeting the definition of one or more hazard classes that are authorized to be shipped under the small quantity provision and that are in the designated maximum quantities per inner packaging may be shipped in accordance with § 173.4, provided all the conditions of the exception are met. Hazardous materials shipped under the 173.4 are not subject to any other requirements of the HMR.
- Q4. Define the terms “sift-proof” and “leakproofness” as they apply to testing of packages containing hazardous materials.

- A4. As defined in § 171.8, "sift-proof" packaging means a packaging impermeable to dry contents, including fine solid material produced during transportation. Under the HMR, a "leakproofness" test is conducted on a non-bulk packaging intended to contain liquids and means the packaging must be leak-tight.

As discussed in the November 11, 1997 letter to Laidlaw Transportation Services, § 173.240 authorizes non-specification closed bulk bins (e.g., roll-on/roll-off containers) for "Solids containing flammable liquid, n.o.s., UN3175", that must be sift-proof and meet the applicable requirements in §§ 173.24 and 173.24b. The HMR do not require a leakproofness test for non-specification closed bulk bins. The May 1, 1997 letter to the Winters Company discussed applying the leakproofness tests when using non-bulk packagings in accordance with Special Provision "47".

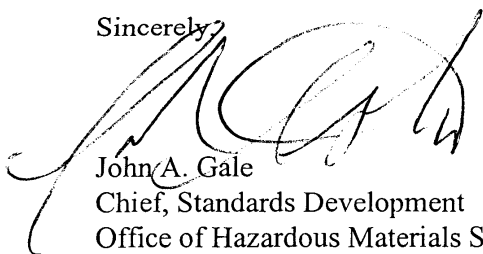
- Q5. Notwithstanding the responses to the questions above, are there any conditions where a Division 4.1 material can be legally transported in a garbage or dump truck, without labels, placards, shipping papers, or a hazardous waste transporter license, along with other trash.

- A5. No. Although a Division 4.1 (flammable solid) material may be transported in a non-specification packaging under § 173.240 (e.g., dump truck), provided it is a sift-proof closed vehicle, such shipment is not excepted from the hazard communication requirements under the HMR (e.g., shipping papers and placards).

Hazardous waste that does not require preparation of a Uniform Hazardous Waste Manifest (UHW) under 40 CFR Part 262 is not a "hazardous waste" under 49 CFR for purposes of transportation in commerce. The hazardous waste transporter license is governed by the regulations of the Environmental Protection Agency.

I hope this satisfies your inquiry. If we can be of further assistance, please contact us.

Sincerely,



John A. Gale  
Chief, Standards Development  
Office of Hazardous Materials Standards



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Engrum  
§ 172.102  
Special Provisions  
04 - 0063

March 18, 2004

Mr. Edward Mazzulo  
United States Department of Transportation  
400 7<sup>th</sup> Street SW  
Washington, DC 20590

*Sent via U.S. Mail and fax to (202) 366-3012*

Subject: Transportation of Solids That Have Absorbed Flammable Liquids

Dear Mr. Mazzulo:

After several conversations with the Department of Transportation (D.O.T.) Hazardous Materials Information Center and subsequent research of 49 CFR, the following clarifications are respectfully requested.

Introduction

The subject of the requested clarifications concerns the Hazardous Materials Regulations related to the transportation of flammable liquids (unleaded gasoline) contained in absorbents used to clean surface spills, used fuel filters, and used hoses from retail gasoline outlets. For the purpose of this discussion, we will assume that all liquid has been drained and that no free liquid is visible at the time the package is closed. Nonetheless, these materials may have gasoline absorbed in the materials. We assume that the materials should be shipped as Class 4.1 (Flammable Solid).

1. Hazard Class

In order to meet the definition for Class 4.1, the material described in the introduction may be tested to see if it is a readily combustible solid using a "burn rate" test in accordance with the UN Manual of Tests and Criteria (49 CFR 173.125 (a)(3)), or, by using Special Provision 47 (49 CFR 172.102(3)(c)). We understand that the burn rate test is designed for granular material and would not be an appropriate test method for fuel filters or hoses. We would appreciate guidance from D.O.T. to establish a program to determine through testing or other means whether the materials described above can be excluded from D.O.T. hazardous materials regulations. Our objective with such a program would be to make a determination for all such materials generated continuously at a network of a few thousand facilities throughout the U.S.

2. Transportation by Maintenance Contractor

Maintenance contractors are hired to maintain and repair the pump and tank equipment at the gas stations. In the course of their work, they may replace fuel filters. Many of the

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retail gasoline outlet operators are conditionally exempt small quantity generators (CESQG). EPA defines a CESQG as a generator that does not accumulate a total of more than 1000 kilograms of hazardous waste and does not generate more than 100 kilograms of hazardous waste or 1 kilogram of acutely hazardous waste in any calendar month (40 CFR 261.5). If the facility is a CESQG, then it is not required to use a hazardous waste manifest when shipping for offsite disposal or recycling. The filter(s) would qualify as a "Material of Trade," since it is not a hazardous waste by D.O.T.'s definition, and the contractor would be supporting a principal business that is not transportation (49 CFR 171.8). Therefore, the maintenance contractor would be able to legally transport the filter(s) without shipping papers, placards, or hazardous materials license, provided the filters follow packaging requirements in 49 CFR 173.6 (b), the gross weight of any package does not exceed 30 kg, and the maintenance contractor vehicle contains less than 454 kg of hazardous materials (49 CFR 172.504(c)(1)). The packaging would not need to conform to 49 CFR 173.6 (b)(4) because these packaging requirements refer to gasoline as a flammable liquid as opposed to the fuel filter(s), which is/are assumed to be a flammable solid(s). Please confirm or refute this interpretation and provide any other requirements for the maintenance contractor scenario above from the perspective of D.O.T.

### 3. Transportation under Small Quantity Exception

If the materials described in the introduction are packaged such that each package contains 30 g or less of solid material (absorbent or filter) or is a solid with 30 ml or less of gasoline per package, then the gasoline retailer (shipper) would be able to use the small quantity exception in 49 CFR 173.4. Therefore, if the shipper follows all requirements for preparing the inner and outer packages and labeling provided in 49 CFR 173.4, no other D.O.T. regulations would apply to either the shipper or the transporter for the transport of this material. Please confirm or refute this interpretation.

### 4. Packaging

Please clarify the requirements for sift proof versus leak proof containers. Two attached guidance letters appear to contradict each other with respect to this requirement: November 7, 1997 letter to Mr. Jerry Davis of Laidlaw Transportation Services from Mr. Delmer F. Billings; May 1997 letter to Mr. Michael Byrnes of M.L. Winters Company LLC. In the first letter, D.O.T. allows for transportation of rags containing flammable liquid in plastic bags and fiberboard boxes as "Solids containing flammable liquid, n.o.s., 4.1, UN 3175, PG II" in "sift-proof" closed roll off containers and dump trailers, and, defines a sift-proof package as "...one that is constructed so that its contents cannot pass through." This letter appears to indicate that transportation of the materials referenced in the introduction can be transported in plastic bags and fiberboard boxes. In the second, D.O.T. states that solids containing flammable liquid, n.o.s. must be transported in a package "that has passed a leakproofness test at the Packing Group II level." This letter appears to indicate that the bags and fiberboard boxes would not be acceptable, as they have not passed the leakproofness test. Please clarify these two interpretations and describe the difference and application of the terms "sift-proof" and "leakproofness."

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5. Transportation to Municipal Landfill

In some states the materials described in the introduction may be legally shipped as a hazardous waste without a manifest if the generator is a CESQG (as described in #2 above). In these cases, EPA (RCRA) allows these materials to be deposited to a municipal landfill. Notwithstanding your responses to the questions above, are there any conditions where a Class 4.1 material can be legally transported in a rubbish truck (no labeling, placarding, shipping papers, or hazardous waste/material transporter license) along with the other trash collected in a dumpster?

We look forward to the courtesy of your prompt response. Please do not hesitate to call me to discuss this interpretation.

Sincerely,



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cc: Ms. Diane Lavelle, D.O.T.